

REMARKS

The present reply is responsive to the Office Action dated June 15, 2004. Claims 16-37 have been withdrawn. Original claims 1-15 are present in the instant application.

Claims 1-2, 5, 8 and 15 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Sung et al.*, U.S. Patent No. 5,814,862 ("*Sung*"). Applicants respectfully traverse the rejection.

Independent claim 1 requires "depositing a conductive layer to fill the recesses and to cover the gate contacts" and "depositing a metal layer, wherein the metal layer contacts at least a portion of the conductive layer and is in electrical contact with the conductive layer filling the recesses."

As discussed in the detailed description with regard to a preferred embodiment, it is important to cover the gate contact with a conductive layer. "However, in order to ensure electrical contact with selected device components, e.g., transistor source or drain regions in the lower region 202 or elsewhere, the silicon layer 240 is not recessed below the tops of the gate contacts 210." (Specification at ¶ 0024.) Furthermore, "by ensuring that the silicon layer 240 covers the gate contacts 210, the process protects the gate contacts 210 and other components and regions of the semiconductor wafer from erosion during bitline etching. In addition, the continuous covering provides electrical contact to every trench filled by the silicon layer 240, even if the metal layer 260 only contacts the silicon layer 240 at a fraction of the area designated by the bitline mask pattern." (Specification at ¶ 0027.)

In rejecting claim 1, it was asserted that *Sung* discloses depositing a conductive layer (40, 40') to cover a gate contact (50). (See numbered paragraph 8 at pg. 3.)

Additionally, in rejecting dependent claim 4, it was asserted that Sung discloses "the conductive layer (40) covers top surfaces of the gate contacts (50)." (Numbered paragraph 10 at pg. 5.) However, as shown in FIGS. 2I-L of *Sung*, the drain plugs 40 and source lines 40' clearly do not cover the gate contacts 50. In FIG. 2I, the gate contacts are uncovered. In FIGS. 2J-L, the gate contacts are covered by an inter-metal dielectric and/or by a metal bit line. There is no teaching or suggestion in *Sung* to deposit a conductive layer to cover the gate contacts, including keeping the gate contacts covered by the layer even during subsequent processing (e.g., depositing a metal layer over at least a portion of the conductive layer).

Sung is deficient in anticipating the claimed invention because it does not include each and every element of the claimed invention. Therefore, because *Sung* lacks a disclosure or teaching of all of the elements of independent claim 1, applicants respectfully request reconsideration and allowance of this claim. Claims 2, 5, 8 and 15 depend from claim 1 and contain all of the limitations thereof as well as other limitations that are neither disclosed nor suggested by the prior art of record. Accordingly, applicants submit that the dependent claims are likewise patentable.

Claims 3-4, 6-7 and 9-14 were rejected under 35 U.S.C. § 103(a) as being obvious in view of *Sung* in combination with one or more other references. Applicants respectfully traverse these rejections. Claims 3-4, 6-7 and 9-14 each depend from independent claim 1. As discussed above, *Sung* is deficient in not teaching or suggesting all of the limitations of claim 1. None of the cited references, either alone or in combination, remedies the deficiencies of *Sung*. Therefore, applicants respectfully request reconsideration and allowance of 3-4, 6-7 and 9-14.

As it is believed that all of the rejections set forth in the Office Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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